

Mullan

Fuels Assessment

Areas within the one mile of home sites:

Located near the eastern extent of Shoshone County, along Interstate 90, and the South Fork of the Coeur d'Alene River, this community is fairly flat in comparison to other communities in the county. Forests surrounding the community extend into the borders of town. Access to and from the community is provided by Interstate 90 both east and west bound.



Forest conditions in the area differ based on which side of town you consider. To the north of Mullan, the slopes are predominately south facing and dominated by Douglas-fir, ponderosa pine, western white pine, and assorted other species. The fire fuel model on these forest sites is mainly model 2 and 5 on upslope locale and model 8 near

streams. The south side of town is relatively flat to north facing and supports western red cedar, western white pine, western hemlock, grand fir, and lodgepole pine. Forest fuel models in these habitats range from model 8 to 10. Slopes in both locations range from fairly flat to over 40%.



North of Mullan, up the Mill Creek Drainage, a couple dozen homes are

located very near the road. The forests in this creek drainage extend right up to the edges of private homes. As is the case with other home sites in the county, these homes would greatly benefit from the construction of defensible spaces; removal of trees immediately adjacent to homes, pruning, piling of debris, and prescribed pile burning of the slash. However, there have been forest management activities conducted on the west side of the road (east facing slope) on the private ground. The selective harvest on that parcel did an excellent job of removing understory trees from the parcel, leaving dominants and co-dominants behind. The spacing is adequate to limit the potential of a crown fire to spread in that stand. This is a respectable model to emulate in the region in an effort to manipulate forest stand conditions to reduce the risk that wildfires will destroy homes adjacent to the forest. There are still a few activities that will further reduce the risk in this creek drainage, but they will be detailed in the following section.

Areas within 3 miles of the community center, but outside the one mile home zone:

There is no significant difference between the forest conditions surrounding the home sites of this community and the conditions found out to a 3 mile radius, except for the obvious differences dictated by the changes in elevation. For planning purposes, the landowners in these areas should carefully consider modifying silvicultural prescriptions,



when they are implemented, to adhere to the principles outlined in this report which details silvicultural practices. These practices, implemented on a broad scale, have the potential to make a meaningful difference in fire protection to the community of Mullan.

From Mullan, elevations climb to over 5,000 feet where the US Forest

Service is the primary owner. The BLM is also a significant landowner in this area (within 1 mile of the community). Forest health issues dominate any discussion of this forest ecosystem as insects have infected large areas of this region, killing thousands of trees and turning them red. These trees are easily seen from I-90 as motorists travel from Mullan into Montana. These landscapes present a significant fire risk to the surrounding communities of Mullan, Larson, and the homes along the valley bottom of the South Fork of the Coeur d'Alene River. The federal land management agencies responsible for the stewardship of these forests should make every effort to mitigate the potential for loss due to a wildfire in the area.

Community Risk Assessment

Mullan had 821 residents recorded during the 2000 census. This community has approximately 426 structures located within 3 miles of the city center. This community has fire fighting resources and access to the interstate highway and surrounding forests. Not all of these structures are considered at high risk to wildfire loss. Those buildings within 1 mile of the city center are at-risk, but not to the degree of the buildings located beyond this limit. It is estimated that 60 of these buildings are at high risk, and that the remaining 366 buildings are at a moderate-risk to wildfire. Shoshone County Fire District №3 and the Mullan Volunteer fire district both provide home site fire protection in this area. The Idaho Department of Lands in Cataldo provides wildland fire protection for the Mullan area.

As already mentioned, the homes located in the northwest corner of the community, along mill





creek, have been the beneficiaries of good forest management practices near their homes. However, there are still a few activities in this area that will further increase the defensibility of these homes against wildfire. First, trees above the homes up to the level of the forest access road should be pruned to a height of 15 feet. The branches from the pruning should

be hand piled. In the fall, after rains have made the forest safer for fire, a hand-ignited broadcast burn of the area should be conducted. This underburn should concentrate on burning the piles of branches from the pruning as well as igniting jackpots of existing slash that currently remains on site. While most of this is private land, there is a small amount of BLM ground in this fuels abatement area. These fuel modifications should be conducted from the edge of the BLM land on the northern extent, southward 3,500 feet on the east facing slopes all the way to the center of section 34, just above Faye St, in Mullan.

The homes along the northern edge of the community are all bordered with forest trees. Normally, this condition would dictate that a large buffer zone be created upslope of the homes where trees are thinned and debris is burned. However, the trees that border the homes along the northern edge of the community only extend up the slope approximately 300 to 400 feet and give way to shrubs and scattered trees (and the Mullan “M” overlooking the community). Homeowners should create a defensible space around their homes that includes trees pruned



to 15 feet or above, with all forest debris and litter disposed of through chipping or burning to a range of 125 feet from their personal property.

South Mullan is divided into two distinct groups of homes separated by a stand of trees around Boulder Creek. This stand of trees is quite substantial and provides both a visual and a noise buffer from the interstate adjoining the stand. However, this dense thicket of conifers is also a fire risk for the residents of South Mullan. This forested area possesses forest fire fuel models 8 and 10, with predicted rate of fire spread of between 100 and 520 feet per hour. Given the average August conditions at midday, a fire starting on one side of the community would spread to the other side of the community in as little as 45 minutes, but not more than about 4 hours. Given the number of homes in the area and impact that forest management activities would have to mitigating these potential losses, this area receives a high priority for treatment in the county.

Further south of the community, timber harvesting activities have selectively harvested trees from the area leaving a stand that will retard the spread of a potential wildfire, once the logging slash has been disposed of (currently that logging slash would classify that area as fuel model 11 and 12). We strongly recommend that the trees found in the three patches surrounding the community of South Mullan (east and west of the community and in the center of the community) be thinned and pruned with all of the logging slash disposed of through pile and broadcast burning.

Homeowners in this community are advised to create 300 foot defensible zones around their homes in conjunction with the fuel mitigation activities to be carried out on the forest stand inside the community. Many homeowners in South Mullan have wood piles against home structures, have rain gutters piled with needles, and buildings overtopped by trees.



These conditions put all homes in the community at risk. A community focus to make their homes “fire-safe” would benefit the entire town.

The remaining areas of Mullan, beyond the community’s borders are a variety of home conditions from houses in the valley bottoms surrounded by a combination of trees and grass fields, to homes located completely in the forest. While fuel conditions are not at the highest risk for wildfire spread, the homeowners are advised to create home defensible spaces around their homes and limit the potential that a crown fire could ignite their personal belongings.

